AMENDMENTS TO THE CLAIMS

1.   (Canceled)

2.   (Currently amended) A method according to ~~claim 1~~ claim 9, wherein the markup language comprises Extensible Markup Language (XML).

3.   (Original) A method according to claim 2, wherein specifying the unified schema comprises specifying a Document Type Definition (DTD).

4.   (Original) A method according to claim 2, wherein defining the correspondences comprises defining data transformation rules in Extensible Style Language (XSL).

5.   (Original) A method according to claim 4, wherein mapping the source data comprises transforming the data using an XSL engine.

6.   (Currently amended) A method according to ~~claim 1~~ claim 9, wherein defining the correspondences comprises selecting one or more of the data fields in the sources to correspond to one of the markup tags in the schema, and determining a conversion function to apply to the one or more data fields.

7.   (Original) A method according to claim 6, wherein determining the conversion function comprises determining the function so as to generate a data element indicated by the corresponding one of the markup tags.

8.   (Original) A method according to claim 6, wherein determining the conversion function comprises determining the function to generate an attribute of the unified data indicated by the corresponding one of the markup tags.

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9.   (Currently amended) A method ~~according to claim 1~~ for processing source data from a plurality of diverse sources in a selected data domain, comprising:

specifying a unified schema that is defined specifically for the selected data domain, from among a multiplicity of schemata that are specific to different data domains selected from a group of domains consisting of computer system performance evaluation, customer relationship management, healthcare, and telecommunications, the specified schema listing markup tags in the selected data domain that can exist in a document in the markup language;

defining correspondences of data fields from the sources to the markup tags listed by the selected schema; and

mapping the source data in accordance with the correspondences to generate unified data in the markup language,

wherein at least some of the source data are represented in a language other than the markup language, and wherein mapping the source data comprises transforming the data to the markup language.

10.   (Currently amended) A method according to ~~claim 1~~ claim 9, and comprising querying the sources by addressing a query to the unified data in the markup language.

11.   (Currently amended) A method ~~according to claim 10~~ for processing source data from a plurality of diverse sources in a selected data domain, comprising:

specifying a unified schema that is defined specifically for the selected data domain, from among a multiplicity of schemata that are specific to different data domains selected from a group of domains consisting of computer system performance evaluation, customer relationship management, healthcare, and telecommunications, the specified schema listing markup tags in the selected data domain that can exist in a document in the markup language;

defining correspondences of data fields from the sources to the markup tags listed by the selected schema;

mapping the source data in accordance with the correspondences to generate unified data in

the markup language; and

querying the sources by addressing a query to the unified data in the markup language,

wherein mapping the source data comprises mapping the source data responsive to the

query.

12.   (Canceled)

13.   (Currently amended) Apparatus according to ~~claim 12~~ claim 18, wherein the markup

language comprises Extensible Markup Language (XML).

14.   (Original) Apparatus according to claim 13, wherein the unified schema comprises a

Document Type Definition (DTD).

15.   (Original) Apparatus according to claim 13, wherein the definitions of the correspondences

comprise data transformation rules in Extensible Style Language (XSL).

16.   (Original) Apparatus according to claim 15, wherein the processor is adapted to map the

source data by transforming the data using an XSL engine.

17.   (Currently amended) Apparatus according to ~~claim 12~~ claim 18, wherein each of the

definitions of the correspondences comprise a selection of one or more of the data fields in the

sources to correspond to at least one of the markup tags in the schema, together with a conversion

function to be applied by the processor to the one or more source fields.

18.   (Currently amended) Apparatus ~~according to claim 12~~ for processing source data from a

plurality of diverse sources in a selected data domain, comprising a data integration processor,

which is adapted to receive and store a unified schema that is defined specifically for the selected

data domain, from among a multiplicity of schemata that are specific to different data domains selected from a group of domains consisting of computer system performance evaluation, customer relationship management, healthcare, and telecommunications, the schema listing markup tags in the selected data domain that can exist in a document in the markup language, and which is further adapted to receive and store definitions of correspondences of data fields from the sources to the markup tags listed by the schema, and to map the source data in accordance with the correspondences to generate unified data in the markup language,

wherein at least some of the source data are represented in a language other than the markup language, and wherein the processor is adapted to transform the data to the markup language.

19.   (Currently amended) Apparatus according to ~~claim 12~~ claim 18, wherein the processor is adapted to receive and respond to a query addressed to the unified data in the markup language.

20.   (Currently amended) Apparatus ~~according to claim 19,~~ for processing source data from a plurality of diverse sources in a selected data domain, comprising a data integration processor, which is adapted to receive and store a unified schema that is defined specifically for the selected data domain, from among a multiplicity of schemata that are specific to different data domains selected from a group of domains consisting of computer system performance evaluation, customer relationship management, healthcare, and telecommunications, the schema listing markup tags in the selected data domain that can exist in a document in the markup language, and which is further adapted to receive and store definitions of correspondences of data fields from the sources to the markup tags listed by the schema, and to map the source data in accordance with the correspondences to generate unified data in the markup language,

wherein the processor is adapted to receive and respond to a query addressed to the unified data in the markup language, and

wherein the processor is adapted to map the source data responsive to the query.

21.   (Currently amended) Apparatus according to ~~claim 12~~ claim 18, and comprising a plurality of distributed data storage devices, which hold the diverse data sources, wherein the processor is adapted to retrieve the source data from the distributed devices.

22.   (Canceled)

23.   (Currently amended) A product according to ~~claim 22~~ claim 28, wherein the markup language comprises Extensible Markup Language (XML).

24.   (Original) A product according to claim 23, wherein the unified schema comprises a Document Type Definition (DTD).

25.   (Original) A product according to claim 23, wherein the definitions of the correspondences comprise data transformation rules in Extensible Style Language (XSL).

26.   (Original) A product according to claim 25, wherein the instructions cause the computer to transform the data using an XSL engine.

27.   (Canceled)

28.   (Currently amended) A computer software product ~~according to claim 27,~~ for processing source data from a plurality of diverse sources in a selected data domain, the product comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to receive a unified schema that is defined specifically for the selected data domain, from among a multiplicity of schemata that are specific to different data domains selected from a group of domains consisting of computer system performance evaluation, customer relationship management, healthcare, and telecommunications, the schema listing markup tags in the selected data domain that can exist in a document in the markup language, the

instructions further causing the computer to receive definitions of correspondences of data fields from the sources to the markup tags listed by the schema, and to map the source data in accordance with the correspondences to generate unified data in the markup language,

wherein the instructions further cause the computer to accept and respond to a query addressed to the unified data in the markup language,

wherein the product comprises middleware, which causes the computer to map the source data responsive to the query.

29.   (Original) A product according to claim 28, wherein at least some of the source data are represented in a language other than the markup language, and wherein the middleware causes the computer to transform the data to the markup language.

30.   (Canceled)

31.   (Previously presented) Apparatus for processing source data from a plurality of diverse sources in diverse formats in a selected data domain, comprising a data integration processor, which is adapted to receive and store a unified schema that lists markup tags in the selected data domain that can exist in a document in the markup language, and to receive and store definitions of correspondences of data fields from the sources to the markup tags listed by the schema, and

which is further adapted to receive a query with respect to the sources in the markup language, and upon receiving the query, to map the source data from at least one of the diverse formats to the unified schema responsively to the query in accordance with the correspondences so as to generate a reply to the query, so that the reply comprises unified data in the markup language.

32.   (Previously presented) A computer software product for processing source data from a plurality of diverse sources in diverse formats in a selected data domain, the product comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to receive a unified schema that lists markup tags in the selected

data domain that can exist in a document in the markup language and to receive definitions of correspondences of data fields from the sources to the markup tags listed by the schema,

the instructions further causing the computer to receive a query with respect to the sources in the markup language, and upon receiving the query, to map the source data from at least one of the diverse formats to the unified schema responsively to the query in accordance with the correspondences so as to generate a reply to the query, so that the reply comprises unified data in the markup language.

33.   (Previously presented) A product according to claim 32, wherein the product comprises middleware, which causes the computer to map the source data responsively to the query.

34.   (Previously presented) A product according to claim 33, wherein at least some of the source data are represented in a language other than the markup language, and wherein the middleware causes the computer to transform the data to the markup language.